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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/307,023	05/07/99	SALCUDEAN	S IMM1P066.RE

WM01/0605

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EXAMINER

CHANG, K

ART UNIT

PAPER NUMBER

2673

10

DATE MAILED: 06/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No. 09/307,023	Applicant(s) SALCUDEAN ET AL.	
	Examiner KENT W CHANG	Art Unit 2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 November 2000.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 19-24, 27-34, 37-49, 51-50, 63-92, and 105-108 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-24, 27-34, 37-49, 51-50, 63-92, and 105-108 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- |  |  |
|--|--|
| 15) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                            | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 17) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7, 8</u> . | 20) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The references listed in the Information Disclosure Statement submitted 7/20/00 and 3/26/01 have been considered by the examiner (see attached PTO-1449).

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 19-24, 27-34, 37-49, 51-50, 63-92, and 105-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollis, Jr. et al (U.S. Patent No. 5,146,566).

Hollis, Jr. discloses a computer user input/output device in the form of a joystick or mouse comprising a base (410, 502), a handle (420, 512), a permanent magnet means (140), a support providing the handle with a range of movement in a plane (X, Y plane) in each of the two directions, wherein the position and orientation of the handle is sensed by sensors (160) and the data is input to the computer for generating force feedback (column 5 line 52 to column 6 line 15). The device of Hollis, Jr. also includes a local analog processor (610), a local digital signal processor (DSP 620) for controlling the operation of the I/O device. Although Hollis, Jr. does not explicitly mention calculating the force with the local processor, however, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the local processor for calculating the force in the device of Hollis, Jr. so as to reduce the task of

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the main processor and free up the data transmission line by eliminating the need of transmitting force feedback data. Moreover, Hollis, Jr. teaches that the application software may consist of any known program, therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to use the device for selecting menu items since selecting a menu item is one of the basic functions of the cursor controller.

As to claims 22-24, the device of Hollis, Jr. comprises an light emitter and detector (column 5 line 52 to column 6 line 15).

As to claim 71, Hollis, Jr. teaches to use the controller in a flight simulator system to enable the user feel the same tactile sensations in a joystick that he would feel under actual operating conditions, such as engine vibration, resistance which varies as a function of the forces on the aircraft control surface, and the like.

As to claim 76, Hollis, Jr. teaches that the application software may consist of any known program, therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to output force in Z-axis in the device of Hollis, Jr. since it merely depends on the application being used.

### ***Response to Arguments***

4. Applicant's arguments filed 11/20/00 have been fully considered but they are not persuasive.

In response to applicant's argument that that Hollis does not teach receiving the force value from the host computer, note that the system of Hollis uses the positional

data for calculating the force value, and outputs the force value for generating the force feedback. It would have been obvious for one of ordinary skill in the art at the time the invention was made that the system would perform equally well with either of the two processors, the CPU of the host computer or the local processor, being used to calculate the force value.

The remainder of the pertinent topics for argument are present in the appropriate rejections above.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the

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examiner should be directed to Kent Chang whose telephone number is (703) 305-4824.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

**Any response to this final action should be mailed to:**

**Box AF**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 308-9051, (for formal communications; please mark  
"EXPEDITED PROCEDURE")

**Or:**

(703) 308-6606 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

  
KENT CHANG

PRIMARY EXAMINER

TC 2670

kc

6/1/01